

ENHED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 100008. USPIOL 2007

APPLICATION NO	FILING	DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/630,738	07/31	/2003	Mi Sook Nam	8733.444.10-US 1411	
30827	7590	04/12/2005 EXAMINER			INER
		LDRIDGE LL	P	HON, SO	W FUN
1900 K STREET, NW WASHINGTON, DC 20006			ART UNIT	PAPER NUMBER	
,				1772	

DATE MAILED: 04/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicatio	n No.	Applicant(s)	
Office Action Summary		10/630,73	8	NAM, MI SOOK	
		Examiner		Art Unit	
		Sow-Fun I		1772	
Period fo	The MAILING DATE of this communication Reply	on appears on the	cover sheet with the c	orrespondence ac	ddress
THE - Exter after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR F MAILING DATE OF THIS COMMUNICAT nsions of time may be available under the provisions of 37 (SIX (6) MONTHS from the mailing date of this communicat period for reply specified above is less than thirty (30) days to period for reply is specified above, the maximum statutory re to reply within the set or extended period for reply will, by reply received by the Office later than three months after the ed patent term adjustment. See 37 CFR 1.704(b).	'ION. CFR 1.136(a). In no eve tion. s, a reply within the statu period will apply and wil y statute. cause the appli	nt, however, may a reply be tim tory minimum of thirty (30) day: l expire SIX (6) MONTHS from cation to become ABANDONE	nely filed s will be considered time the mailing date of this o	ly. xxmmunication.
Status					
1)	Responsive to communication(s) filed on	·			
2a) <u></u> ☐	This action is FINAL . 2b)⊠ This action is non-final.				
3)[Since this application is in condition for a closed in accordance with the practice ur				e merits is
Dispositi	ion of Claims				
4)⊠	Claim(s) 1,2 and 33 is/are pending in the	application.			
-	4a) Of the above claim(s) is/are wi		nsideration.		
5)	Claim(s) is/are allowed.				
6)⊠	Claim(s) 1,2,33 is/are rejected.				
•	Claim(s) is/are objected to.				
8)□	Claim(s) are subject to restriction	and/or election re	equirement.		
Applicati	ion Papers				
9)[The specification is objected to by the Ex	aminer.			
10)🛛	The drawing(s) filed on 31 July 2003 is/ar	re: a)⊠ accepted	d or b) objected to b	y the Examiner.	
	Applicant may not request that any objection	to the drawing(s) b	e held in abeyance. See	e 37 CFR 1.85(a).	
	Replacement drawing sheet(s) including the				
11)	The oath or declaration is objected to by	the Examiner. No	te the attached Office	Action or form P	TO-152.
Priority (under 35 U.S.C. § 119				
12)⊠	Acknowledgment is made of a claim for fo	oreign priority und	der 35 U.S.C. § 119(a))-(d) or (f).	
a)	⊠ All b) Some * c) None of:				
	1. Certified copies of the priority docu	uments have bee	n received.		
	2. Certified copies of the priority docu	uments have bee	n received in Applicati	on No	
	3. Copies of the certified copies of th	e priority docume	nts have been receive	ed in this National	l Stage
	application from the International E				
* (See the attached detailed Office action for	a list of the certif	ied copies not receive	ed.	
Attachmer	at(s)				
_	ce of References Cited (PTO-892)		4) Interview Summary		
2) Notice	ce of Draftsperson's Patent Drawing Review (PTO-9		Paper No(s)/Mail D: 5) Notice of Informal F		O-152)
	mation Disclosure Statement(s) (PTO-1449 or PTO/ er No(s)/Mail Date <u>10/01,12/01</u> .	(2R\08)	6) Other:	атопт приновион (г. г	♥ .02 ,

DETAILED ACTION

Election/Restrictions

1. Independent claims 1, 33 are generic to Markush groups consisting of a plurality of disclosed patentably distinct species listed below. Applicant is required under 35 U.S.C. 121 to elect a single disclosed group of species, even though this requirement is traversed.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Kurt Eaton on March 11, 2005, a provisional election was made with traverse to prosecute the invention of Group V. Affirmation of this election must be made by applicant in replying to this Office action. Groups I-IV, VI-X are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. The Markush groups of species are listed below.

Group	Structures				
I	~ ,	~	~		

II	CH _s CH _s
	16. 16. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10
	VO. D
III	0.0.0.0.0 0.0.0.0
IV	0.0.00.0
V	
VI	
VII	
VIII	CH ₃
	ONO INDI ONO CH.
IX	NH-O- NH-O-
	NH-S WH-S
X	CH ₃ CH ₃

Application/Control Number: 10/630,738 Page 2

Art Unit: 1772

Double Patenting

3. The parent application 09/893,977 was subject to a restriction whereby the photoalignment material in claims 1, 2 were non-elected, cancelled and now filed in the present
divisional application. The method claims 18-32, which were also non-elected, cancelled, and
filed in divisional application 10/630,781. 09/893,977 issued as US 6,627,269 on September 30,
2003 and 10/630,781 issued as US 6,797,096 on September 28, 2004. The present application
was filed on July 31st, 2003 before the issue dates of the two patents. Therefore US 6,627,269
and US 6,797,096 do not constitute prior art.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Yanagisawa et al. (US 5,239,398).

Yanagisawa teaches an alignment material (film) (col. 11, lines 20-25) with the chemical formula (4) below:

which when drawn out as two repeat units, corresponds to a polymer formed from a monomer containing the group in chemical formula 2 of Applicant below:

Art Unit: 1772

The polymer of Yanagisawa meets the polymer of Applicant when a = n/2 > 0, and b = c = 0 in chemical formula 1 of Applicant.

Yanagisawa fails to disclose that the alignment material is a photo-alignment one, or that the ethene group in the polymer main chain is photo-reactive. However, the chemical structure of the ethene group is the same, and being photo-reactive, qualifies the alignment material as a photo-alignment one. Products of identical chemical composition cannot have mutually exclusive properties. A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. See MPEP 2112.01 [R-2].

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571)272-1498. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Application/Control Number: 10/630,738

Art Unit: 1772

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Page 4

Sow-Fun Hon

HAROLD PYON

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